ELSEVIER

Journal of Organometallic Chemistry 550 (1998) 485–486

Journal of Organometallic Chemistry

Author Index of Volume 550

Adams, H., 7
Adams, K.J., 315
Akhter, Z., 131
Allan, R.E., 71
Armspach, D., 193
Armstrong, D.R., 233, 355

Bailey, N.A., 7
Ball, S.C., 457
Banister, A.J., 241
Barker, J., 301
Batsanov, A.S., 59, 445
Beddows, C.J., 267
Beswick, M.A., 71
Bickelhaupt, F., 347
Boche, G., 359, 381
Bolton, P.D., 445
Bowmaker, G.A., 89
Box, M.R., 267
Brown, M.A., 165
Butters, C., 267

Cain, C.P., 29
Callaghan, K.L.F., 441
Cardin, C., 347
Carr, N., 267
Carroll, P.J., 77
Chisholm, M.H., 141
Chivers, T., 213
Churakov, A.V., 89
Clegg, W., 183, 233, 473
Collinson, S.R., 7
Constable, E.C., 193
Cooke, P.A., 341
Copley, R.C.B., 445
Cowey, C., 151
Coxall, R.A., 473
Crabtree, S.P., 59
Craig, F.J., 355
Cranson, S.J., 207
Curtis, M.A., 469

Dam, M.A., 347
Davidson, M.G., 445, 449, 481
Davies, J.E., 431
Davies, M.K., 71
Davies, R.P., 457
Davies, S.R., 29
De Kanter, F.J.J., 347
Deng, H., 309
Devitt, P.G., 29
Dillon, K.B., 481

Donaghy, K.J., 77
Donkervoort, J.G., 463
Dörfler, U., 441
Dorn, H., 1
Dyson, P.J., 431

Edelman, M.A., 397
Errington, R.J., 473
Ezhova, M.B., 409

Fehlner, T.P., 21
Fenton, D.E., 7
Ferguson, G., 477
Finn, M.G., 469
Fleischer, R., 173
Fornies-Camer, J., 347
Fox, M.A., 207, 331
Fusek, J., 125

Gallagher, J.F., 477
Gibson, V.C., 453
Gindl, J., 1
Goeta, A.E., 449
Greatrex, R., 207, 331, 341
Green, M., 267
Green, M.L.H., 63
Greenwood, N.N., 207
Grimes, R.N., 469

Haggitt, J., 63
Harris, R.K., 89
Harwell, D.E., 423
Hawley, J.C., 7
Hawthorne, M.F., 423
Heath, S.L., 473
Heaton, B.T., 221
Hitchcock, P.B., 397
Hodgson, S.M., 233
Hofmann, M., 331
Holub, J., 151
Hong, F.-E., 309
Hosmane, N.S., 409
Housecroft, C.E., 193
Howard, J.A.K., 59, 445, 449, 481

Iggo, J.A., 221
Ingham, S.L., 131

Jaballas, J., 101
Jastrzebski, J.T.B.H., 463

Jerzykiewicz, L., 111
Johnson, B.F.G., 431

Kee, T.P., 29
Kennedy, A.R., 355
Kennedy, J.D., 151, 341, 441
Kilner, M., 59
Kim, Y.-h., 341
Kitchen, S.J., 7
Knobler, C.B., 423
Kooijman, H., 463
Krause Bauer, J., 309
Kursawe, M., 267

Lamb, S., 481
Lappert, M.F., 397
Lawlor, F.J., 183
Lehmann, C.W., 59, 449
Lesley, G., 183
Lewis, J., 131
Liu, D.-S., 397
Liu, J., 309
Lustig, C., 445
Lynn, M.A., 141

Maguire, J.A., 409
Mahon, M.F., 267
Marder, T.B., 183
Martin, C.M., 431
May, I., 241
McCarthy, D.A., 309
McGarvey, B.R., 165
McGrath, T.D., 315, 441
McIntyre, G.M., 449
Mehnert, C.P., 63
Mitchell, M.C., 29
Mulvey, R.E., 355
Murphy, M.P., 151

Nabakka, J.M., 423
Neuburger, M., 193
Noltemeyer, M., 1
Norman, N.C., 183

Oh, J.R., 309
Oh, S.-W., 89
Olah, G.A., 119
Onak, T., 101
Orpen, A.G., 183, 255
Ozarowski, A., 165

Parvez, M., 213
Pasynkiewicz, S., 111

Elsevier Science S.A.

Pearson, R.H.H., 431
Phillips, P.R., 301
Pietrzykowski, A., 111
Podkorytov, I.S., 221
Prakash, G.K.S., 119
Price, R.D., 445, 449
Pringle, P.G., 255

Quayle, M.J., 183

Raithby, P.R., 71, 131, 457
Raston, C.L., 283
Rasul, G., 119
Rawson, J.M., 241
Redshaw, C., 453
Rice, C.R., 183
Ridland, J., 473
Rijnberg, E., 463
Roden, M.D., 481
Roesky, H.W., 1
Rosair, G.M., 315

Sampanthar, J., 221
Schade, S., 359, 381
Schatte, G., 213
Schleyer, P.R., 331
Schmidt, H.-G., 1
Scott, A.J., 183
Shah, S.A.A., 1
Sheehan, J.P., 477
Shields, G.P., 457
Shore, S.G., 309
Smeets, W.J.J., 347
Smith, J.N.B., 241
Smith, M.B., 255
Snaith, R., 233, 457
Sneddon, L.G., 77
Sobota, P., 111
Souza, F.E.S., 183
Spalding, T.R., 151, 477
Spek, A.L., 347, 463
Stalke, D., 173
Steiner, A., 71
Štíbr, B., 125

Taylor, R.J., 29
Teixidor, F., 125
Thornton-Pett, M., 151, 341, 441
Tian, S., 397
Trojanowska, L., 111
Tuck, D.G., 165
Tunik, S.P., 221

Van den Ancker, T.R., 283
Van Koten, G., 463
Vicario, J.L., 463
Viñas, C., 125

Wallbridge, M.G.H., 301
Wang, Q., 119
Welch, A.J., 315
Weller, A.S., 315
Wheatley, A.E.H., 233
White, A.J.P., 453
Willett, K.J., 473
Williams, D.J., 453
Williams, R.E., 331
Worboys, K., 255
Wright, D.S., 71

Zehnder, M., 193
Zhang, H., 409

ELSEVIER

Journal of Organometallic Chemistry 550 (1998) 487–493

Journal of Organometallic Chemistry

Subject Index of Volume 550

Ab initio
Formation of the lithium alkylaluminium secondary amide $[Me_2Al\{(PhCH_2)_2N\}_2Li \cdot THF]$ by a methane elimination/amide insertion process (D.R. Armstrong, F.J. Craig, A.R. Kennedy and R.E. Mulvey), 355
Ab initio calculations
A structural and theoretical study of the monolithiation of hydroxylamines (D.R. Armstrong, W. Clegg, S.M. Hodgson, R. Snaith and A.E.H. Wheatley), 233
Six-vertex *nido*-carborane structures with unusual CHB bridges or *endo*-CH hydrogens (M. Hofmann, M.A. Fox, R. Greatrex, R.E. Williams and P.R. Schleyer), 331
Absolute configuration
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29
Alane
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Alkali metal complexes
Synthesis and characterization of trimethylsilylmethyl-, bis(trimethylsilyl)methyl-and silyl-substituted cyclopentadienes and their alkali metal complexes (M.A. Edelman, P.B. Hitchcock, M.F. Lappert, D.-S. Liu and S. Tian), 397
Alkoxide
Organophosphonate derivatives of titanium and niobium alkoxoanions (R.J. Errington, J. Ridland, K.J. Willett, W. Clegg, R.A. Coxall and S.L. Heath), 473
Alkyl
Preparation and structures of some tetraazamacrocyclic complexes of In(III) (P.R. Phillips, M.G.H. Wallbridge and J. Barker), 301
Alkyne bridge
The non-perpendicular and non-parallel alkyne bridge in $W_2(\mu\text{-}C_2H_2)(\mu\text{-}OCH_2^tBu)_2(OCH_2^tBu)_6$ (M.H. Chisholm and M.A. Lynn), 141
η^3-Allyl
The synthesis, structure and reactivity of aldehyde substituted η^3-allylic complexes of molybdenum (C.J. Beddows, M.R. Box, C. Butters, N. Carr, M. Green, M. Kursawe and M.F. Mahon), 267
Alumina
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Aluminium
Formation of the lithium alkylaluminium secondary amide $[Me_2Al\{(PhCH_2)_2N\}_2Li \cdot THF]$ by a methane elimination/amide insertion process (D.R. Armstrong, F.J. Craig, A.R. Kennedy and R.E. Mulvey), 355
Synthesis and structural characterisation of aluminium imino-amide and pyridyl-amide complexes: bulky monoanionic N,N chelate ligands via methyl group transfer (V.C. Gibson, C. Redshaw, A.J.P. White and D.J. Williams), 453
Amide
Formation of the lithium alkylaluminium secondary amide $[Me_2Al\{(PhCH_2)_2N\}_2Li \cdot THF]$ by a methane elimination/amide insertion process (D.R. Armstrong, F.J. Craig, A.R. Kennedy and R.E. Mulvey), 355
(Poly)amine ligands
The effect of (poly)amine ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A $^1H,^6Li$-HOESY NMR study (S. Schade and G. Boche), 359
Amphoteric catalysts
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29
Aqueous solution
A convenient route to carbon-substituted derivatives of *nido*-5,6-$C_2B_8H_{12}$ (B. Štíbr, F. Teixidor, C. Viñas and J. Fusek), 125
Arachno
Metallaheteroborane chemistry. Part 14. Synthesis of the $\{MS_2B_7\}$-cluster compounds $[9,9\text{-}(PX_3)_2\text{-}9,6,8\text{-}PtS_2B_7H_7]$ (where X = Ph or OMe), $[9,9\text{-}(PPh_3)_2\text{-}9,6,8\text{-}RhS_2B_7H_8]$ and $[5,5\text{-}(PPh_3)_2\text{-}5,6,10\text{-}RhS_2B_7H_8]$, and the $\{M_2S_2B_7\}$-cluster compound $[(PPh_3)_2HRh(PPh_3)ClRhS_2B_7H_7]$ (M.P. Murphy, T.R. Spalding, C. Cowey, J.D. Kennedy, M. Thornton-Pett and J. Holub), 151
Arachno-$B_9H_{13}L$
Polyhedral nonaborane chemistry: an unsuspected new isomeric type in the nine-vertex *arachno*-$B_9H_{13}L$ system (K.L.F. Callaghan, U. Dörfler, T.D. McGrath, M. Thornton-Pett and J.D. Kennedy), 441
η-Arene
Synthesis and reactions of [Mo(2,6-lutidine)(phosphine)] derivatives (C.P. Mehnert, J. Haggitt and M.L.H. Green), 63
^{11}B chemical shifts
Experimental and theoretical studies on group 1 metallacarboranes: Synthesis, structure and ab initio calculations of the NMR chemical shifts of the 1-(THF)-1-(TMEDA)-1-Na-2,4-$(SiMe_3)_2$-2,4-$C_2B_4H_5$ and related carboranes (M.B. Ezhova, H. Zhang, J.A. Maguire and N.S. Hosmane), 409
Bibracchial Schiff base macrocycle
Dinuclear copper(I) complexes of 24-membered bibracchial tetraimine Schiff base macrocycles derived from 2,5-diformylthiophene (H. Adams, N.A. Bailey, S.R. Collinson, D.E. Fenton, J.C. Hawley and S.J. Kitchen), 7
Borane cluster
Polyhedral nonaborane chemistry: an unsuspected new isomeric type

in the nine-vertex *arachno*-$B_9H_{13}L$ system (K.L.F. Callaghan, U. Dörfler, T.D. McGrath, M. Thornton-Pett and J.D. Kennedy), 441

Boranes
Studies on tetraborane(8) carbonyl, $B_4H_8 \cdot CO$: its isomeric composition in the gas phase and in solution, and its reactions with alkenes (S.J. Cranson, M.A. Fox, R. Greatrex and N.N. Greenwood), 207

Boron
A molecular orbital analysis of four chromaboranes. On the curious behavior of (η^5-C_5R_5)Cr fragments in a borane cluster environment (T.P. Fehlner), 21
B-frame supported bimetallics. $[(PMe_2ph)_2PtB_9H_{11}Ru(\eta^6$-$^{iso}PrC_6H_4Me)]$ and $[(PMe_2ph)_2PtB_9H_9Ru(\eta^6$-$^{iso}PrC_6H_4Me)]$: an interesting pair of electron-deficient *nido* and *closo* geometries (Y.-h. Kim, P.A. Cooke, R. Greatrex, J.D. Kennedy and M. Thornton-Pett), 341
Six-vertex *nido*-carborane structures with unusual CHB bridges or *endo*-CH hydrogens (M. Hofmann, M.A. Fox, R. Greatrex, R.E. Williams and P.R. Schleyer), 331

Boron hydride
Stability and NMR correlations, experimental vs. calculational, among isoelectronic closo-hexaborane/carborane compounds (J. Jaballas and T. Onak), 101

Cage boron atom
Synthesis and structural characterisation of the carbene-containing metallaheteroborane compound [2-I-2-(Bu^tNC)-3-(Bu^tNHCH)-*closo*-2,1-$PdTeB_{10}H_9$] (G. Ferguson, J.F. Gallagher, J.P. Sheehan and T.R. Spalding), 477

Carbodiimides
Preparation and structures of $\{Li[C(N^tBu)_2(HN^tBu)]\}_2 \cdot (THF)$ and $\{Li_2[C(N^tBu)_3]\}_2$, containing the novel anions $[C(N^tBu)_2(HN^tBu)]^-$ and $[C(N^tBu)_3]^{2-}$ (T. Chivers, M. Parvez and G. Schatte), 213

Carbon-substituted derivatives
A convenient route to carbon-substituted derivatives of *nido*-5,6-$C_2B_8H_{12}$ (B. Štíbr, F. Teixidor, C. Viñas and J. Fusek), 125

Carborane
Experimental and theoretical studies on group 1 metallacarboranes: Synthesis, structure and ab initio calculations of the NMR chemical shifts of the 1-(THF)-1-(TMEDA)-1-Na-2,4-$(SiMe_3)_2$-2,4-$C_2B_4H_5$ and related carboranes (M.B. Ezhova, H. Zhang, J.A. Maguire and N.S. Hosmane), 409
Six-vertex *nido*-carborane structures with unusual CHB bridges or *endo*-CH hydrogens (M. Hofmann, M.A. Fox, R. Greatrex, R.E. Williams and P.R. Schleyer), 331
Stability and NMR correlations, experimental vs. calculational, among isoelectronic closo-hexaborane/carborane compounds (J. Jaballas and T. Onak), 101

Carboranes
A hydridotantalum(V)-carborane analogue of Schwartz's reagent: synthesis and reactivity (M.A. Curtis, M.G. Finn and R.N. Grimes), 469

Chelate
Dithiadiazolyls as heterocyclic chelators: a radical approach to coordination chemistry? (A.J. Banister, I. May, J.M. Rawson and J.N.B. Smith), 241

Chiral derivatising agent
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29

Chromium
A molecular orbital analysis of four chromaboranes. On the curious behavior of (η^5-C_5R_5)Cr fragments in a borane cluster environment (T.P. Fehlner), 21

Cluster
A molecular orbital analysis of four chromaboranes. On the curious behavior of (η^5-C_5R_5)Cr fragments in a borane cluster environment (T.P. Fehlner), 21

Cluster carbonyls
Metal core rearrangements in hetero-bimetallic nona-osmium carbonyl clusters; the crystal and molecular structures of $[Os_9(CO)_{24}\{Au(PCy_3)\}_2]$ and $[Os_9(CO)_{23}(Au_2DPPE)]$ (Z. Akhter, S.L. Ingham, J. Lewis and P.R. Raithby), 131

Cluster compound
Metallaheteroborane chemistry. Part 14. Synthesis of the $\{MS_2B_7\}$-cluster compounds [9,9-$(PX_3)_2$-9,6,8-$PtS_2B_7H_7$] (where X = Ph or OMe), [9,9-$(PPh_3)_2$-9,6,8-$RhS_2B_7H_8$] and [5,5-$(PPh_3)_2$-5,6,10-$RhS_2B_7H_8$], and the $\{M_2S_2B_7\}$-cluster compound $[(PPh_3)_2HRh(PPh_3)ClRhS_2B_7H_7]$ (M.P. Murphy, T.R. Spalding, C. Cowey, J.D. Kennedy, M. Thornton-Pett and J. Holub), 151

C–N–Li cluster
Preparation and structures of $\{Li[C(N^tBu)_2(HN^tBu)]\}_2 \cdot (THF)$ and $\{Li_2[C(N^tBu)_3]\}_2$, containing the novel anions $[C(N^tBu)_2(HN^tBu)]^-$ and $[C(N^tBu)_3]^{2-}$ (T. Chivers, M. Parvez and G. Schatte), 213

Configurational stability
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29

Conformation
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255

Copper(I)
Dinuclear copper(I) complexes of 24-membered bibracchial tetraimine Schiff base macrocycles derived from 2,5-diformylthiophene (H. Adams, N.A. Bailey, S.R. Collinson, D.E. Fenton, J.C. Hawley and S.J. Kitchen), 7

Crystal structure
η^1- and η^2-benzene coordination in $[Ag(C_6D_6)_3BF_4]$ (A.S. Batsanov, S.P. Crabtree, J.A.K. Howard, C.W. Lehmann and M. Kilner), 59
Experimental and theoretical studies on group 1 metallacarboranes: Synthesis, structure and ab initio calculations of the NMR chemical shifts of the 1-(THF)-1-(TMEDA)-1-Na-2,4-$(SiMe_3)_2$-2,4-$C_2B_4H_5$ and related carboranes (M.B. Ezhova, H. Zhang, J.A. Maguire and N.S. Hosmane), 409
Organophosphonate derivatives of titanium and niobium alkoxoanions (R.J. Errington, J. Ridland, K.J. Willett, W. Clegg, R.A. Coxall and S.L. Heath), 473
Synthesis and reactions of [Mo(2,6-lutidine)(phosphine)] derivatives (C.P. Mehnert, J. Haggitt and M.L.H. Green), 63
Vibrational spectroscopy and solid-state MAS NMR studies of mercury(II) acetate complexes [Hg(X)OAc]. Crystal structure of [Hg(CN)OAc] (G.A. Bowmaker, A.V. Churakov, R.K. Harris and S.-W. Oh), 89

Cyclopentadiene
Synthesis and characterization of trimethylsilylmethyl-, bis(trimethylsilyl)methyl-and silyl-substituted cyclopentadienes and their alkali metal complexes (M.A. Edelman, P.B. Hitchcock, M.F. Lappert, D.-S. Liu and S. Tian), 397

Cyclopentadienyl
Preparation and structures of some tetraazamacrocyclic complexes of In(III) (P.R. Phillips, M.G.H. Wallbridge and J. Barker), 301

Cyclopentadienylnickel clusters
Reactions of nickelocene with lithium and magnesium alkyls containing β-hydrogen atoms (S. Pasynkiewicz, A. Pietrzykowski, L. Trojanowska, P. Sobota and L. Jerzykiewicz), 111

Deuterobenzene π-coordination
η^1- and η^2-benzene coordination in $[Ag(C_6D_6)_3BF_4]$ (A.S. Batsanov, S.P. Crabtree, J.A.K. Howard, C.W. Lehmann and M. Kilner), 59
DFT/IGLO method
Preparation, ^{29}Si and ^{13}C NMR and DFT/IGLO studies of silylcarboxonium ions (G.K.S. Prakash, Q. Wang, G. Rasul and G.A. Olah), 119
Dicarbaborane
A convenient route to carbon-substituted derivatives of *nido*-5,6-$C_2B_8H_{12}$ (B. Štíbr, F. Teixidor, C. Viñas and J. Fusek), 125
9,10-Dimetallatriptycenes
9,10-Dimetallatriptycenes of group 14: a structural study (M.A. Dam, F.J.J. De Kanter, F. Bickelhaupt, W.J.J. Smeets, A.L. Spek, J. Fornies-Camer and C. Cardin), 347
Dipropargyl thioether
Synthesis and structural characterization of a thioether-bridged *commo*-metallabis(dicarbollide) species: a model system for Venus flytrap cluster reagents (J.M. Nabakka, D.E. Harwell, C.B. Knobler and M.F. Hawthorne), 423
Dithiadiazolyl
Dithiadiazolyls as heterocyclic chelators: a radical approach to coordination chemistry? (A.J. Banister, I. May, J.M. Rawson and J.N.B. Smith), 241

Electron count
B-frame supported bimetallics. $[(PMe_2ph)_2PtB_9H_{11}Ru(\eta^6\text{-}^{1,5,6}PrC_6H_4Me)]$ and $[(PMe_2ph)_2PtB_9H_9Ru(\eta^6\text{-}^{1,5,6}PrC_6H_4Me)]$: an interesting pair of electron-deficient *nido* and *closo* geometries (Y.-h. Kim, P.A. Cooke, R. Greatrex, J.D. Kennedy and M. Thornton-Pett), 341
Enantiopurity assay
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29
Enantioselective
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29
Ether-bridged *commo*-metallabisdicarbollide complex
Synthesis and structural characterization of a thioether-bridged *commo*-metallabis(dicarbollide) species: a model system for Venus flytrap cluster reagents (J.M. Nabakka, D.E. Harwell, C.B. Knobler and M.F. Hawthorne), 423

Fluxionality
Studies on tetraborane(8) carbonyl, $B_4H_8 \cdot CO$: its isomeric composition in the gas phase and in solution, and its reactions with alkenes (S.J. Cranson, M.A. Fox, R. Greatrex and N.N. Greenwood), 207

Gallane
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Geometrical isomerism
Studies on tetraborane(8) carbonyl, $B_4H_8 \cdot CO$: its isomeric composition in the gas phase and in solution, and its reactions with alkenes (S.J. Cranson, M.A. Fox, R. Greatrex and N.N. Greenwood), 207
Germanium
9,10-Dimetallatriptycenes of group 14: a structural study (M.A. Dam, F.J.J. De Kanter, F. Bickelhaupt, W.J.J. Smeets, A.L. Spek, J. Fornies-Camer and C. Cardin), 347
GIAO computed ^{13}C
Experimental and theoretical studies on group 1 metallacarboranes: Synthesis, structure and ab initio calculations of the NMR chemical shifts of the 1-(THF)-1-(TMEDA)-1-Na-2,4-$(SiMe_3)_2$-2,4-$C_2B_4H_5$ and related carboranes (M.B. Ezhova, H. Zhang, J.A. Maguire and N.S. Hosmane), 409
GIAO/NMR
Stability and NMR correlations, experimental vs. calculational, among isoelectronic closo-hexaborane/carborane compounds (J. Jaballas and T. Onak), 101
Gold
Metal core rearrangements in hetero-bimetallic nona-osmium carbonyl clusters; the crystal and molecular structures of $[Os_9(CO)_{24}\{Au(PCy_3)\}_2]$ and $[Os_9(CO)_{23}(Au_2DPPE)]$ (Z. Akhter, S.L. Ingham, J. Lewis and P.R. Raithby), 131
Grignard reagent
The metallation of imino(triphenyl)phosphorane by ethylmagnesium chloride: The synthesis, isolation and X-ray structure of $[Ph_3P{=}NMgCl \cdot O{=}P(NMe_2)_3]_2$ (A.S. Batsanov, P.D. Bolton, R.C.B. Copley, M.G. Davidson, J.A.K. Howard, C. Lustig and R.D. Price), 445
Group 4
Synthesis and structural characterization of sulfonates, phosphinates and carboxylates of organometallic Group 4 metal fluorides (S.A.A. Shah, H. Dorn, J. Gindl, M. Noltemeyer, H.-G. Schmidt and H.W. Roesky), 1

Halides
Synthesis and structural characterization of sulfonates, phosphinates and carboxylates of organometallic Group 4 metal fluorides (S.A.A. Shah, H. Dorn, J. Gindl, M. Noltemeyer, H.-G. Schmidt and H.W. Roesky), 1
β-H elimination
Reactions of nickelocene with lithium and magnesium alkyls containing β-hydrogen atoms (S. Pasynkiewicz, A. Pietrzykowski, L. Trojanowska, P. Sobota and L. Jerzykiewicz), 111
Heteroatom assisted lithiation
Formation of mixed aryl–, alkyl–lithium aggregates in the heteroatom assisted lithiation of α,α'-dialkyl substituted 1,3-bis[(dimethylamino)methyl]benzene (J.G. Donkervoort, J.L. Vicario, E. Rijnberg, J.T.B.H. Jastrzebski, H. Kooijman, A.L. Spek and G. Van Koten), 463
Heterobimetallics
Formation of the lithium alkylaluminium secondary amide $[Me_2Al\{(PhCH_2)_2N\}_2Li \cdot THF]$ by a methane elimination/amide insertion process (D.R. Armstrong, F.J. Craig, A.R. Kennedy and R.E. Mulvey), 355
Hetero-trimethylenemethane ligands
Preparation and structures of $\{Li[C(N^tBu)_2(HN^tBu)]\}_2 \cdot (THF)$ and $\{Li_2[C(N^tBu)_3]\}_2$, containing the novel anions $[C(N^tBu)_2(HN^tBu)]^-$ and $[C(N^tBu)_3]^{2-}$ (T. Chivers, M. Parvez and G. Schatte), 213
Hexanuclear and pentanuclear ruthenaborides
Formation of $H_2Ru_6(CO)_{17}$ from $H_2Ru_6(CO)_{18}$ an improved synthesis of $HRu_6(CO)_{17}$ B (D.A. McCarthy, J. Krause Bauer, F.-E. Hong, J.R. Oh, H. Deng, J. Liu and S.G. Shore), 309
Hexaphenylditin
Studies of organotin(IV)-orthoquinone systems (M.A. Brown, B.R. McGarvey, A. Ozarowski and D.G. Tuck), 165
Hg(X)OAc
Vibrational spectroscopy and solid-state MAS NMR studies of mercury(II) acetate complexes [Hg(X)OAc]. Crystal structure of [Hg(CN)OAc] (G.A. Bowmaker, A.V. Churakov, R.K. Harris and S.-W. Oh), 89
$^1H,^6Li$-HOESY
The effect of (poly)amine ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A $^1H,^6Li$-HOESY NMR study (S. Schade and G. Boche), 359

The effect of polyether ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 381

Hydridometallacarboranes
A hydridotantalum(V)-carborane analogue of Schwartz's reagent: synthesis and reactivity (M.A. Curtis, M.G. Finn and R.N. Grimes), 469

Hydroboration
Studies on tetraborane(8) carbonyl, $B_4H_8 \cdot CO$: its isomeric composition in the gas phase and in solution, and its reactions with alkenes (S.J. Cranson, M.A. Fox, R. Greatrex and N.N. Greenwood), 207

Hydroxylamine
A structural and theoretical study of the monolithiation of hydroxylamines (D.R. Armstrong, W. Clegg, S.M. Hodgson, R. Snaith and A.E.H. Wheatley), 233

IGLO/NMR
Stability and NMR correlations, experimental vs. calculational, among isoelectronic closo-hexaborane/carborane compounds (J. Jaballas and T. Onak), 101

Imino-amide ligands
Synthesis and structural characterisation of aluminium imino-amide and pyridyl-amide complexes: bulky monoanionic N,N chelate ligands via methyl group transfer (V.C. Gibson, C. Redshaw, A.J.P. White and D.J. Williams), 453

Iminophosphorane
Low temperature neutron and X-ray diffraction study of imino(triphenyl)phosphorane (M.G. Davidson, A.E. Goeta, J.A.K. Howard, C.W. Lehmann, G.M. McIntyre and R.D. Price), 449
The metallation of imino(triphenyl)phosphorane by ethylmagnesium chloride: The synthesis, isolation and X-ray structure of $[Ph_3P{=}NMgCl \cdot O{=}P(NMe_2)_3]_2$ (A.S. Batsanov, P.D. Bolton, R.C.B. Copley, M.G. Davidson, J.A.K. Howard, C. Lustig and R.D. Price), 445

Indium
Preparation and structures of some tetraazamacrocyclic complexes of In(III) (P.R. Phillips, M.G.H. Wallbridge and J. Barker), 301

Intramolecular electron transfer reactions
Studies of organotin(IV)-orthoquinone systems (M.A. Brown, B.R. McGarvey, A. Ozarowski and D.G. Tuck), 165

Ion pair equilibria
The effect of (poly)amine ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 359
The effect of polyether ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 381

Iridium
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255

[^{6}Li]-α-(phenylthio)benzyllithium
The effect of (poly)amine ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 359
The effect of polyether ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 381

Ligand redistribution
Studies of organotin(IV)-orthoquinone systems (M.A. Brown, B.R. McGarvey, A. Ozarowski and D.G. Tuck), 165

Ligand transfer
Synthesis and structural characterisation of the carbene-containing metallaheteroborane compound [2-I-2-(Bu^{t}NC)-3-(Bu^{t}NHCH)-*closo*-2,1-$PdTeB_{10}H_9$] (G. Ferguson, J.F. Gallagher, J.P. Sheehan and T.R. Spalding), 477

Lithium
A structural and theoretical study of the monolithiation of hydroxylamines (D.R. Armstrong, W. Clegg, S.M. Hodgson, R. Snaith and A.E.H. Wheatley), 233
Formation of the lithium alkylaluminium secondary amide $[Me_2Al\{(PhCH_2)_2N\}_2Li \cdot THF]$ by a methane elimination/amide insertion process (D.R. Armstrong, F.J. Craig, A.R. Kennedy and R.E. Mulvey), 355
The mechanism of lithiation and nitrile insertion reactions of β-methylazines: evidence from the structure of 3-$C_5H_4NCH{=}C(Ph)N(H)C(Ph){=}NLi \cdot PMDETA$ (S.C. Ball, R.P. Davies, P.R. Raithby, G.P. Shields and R. Snaith), 457

Lithium reagent
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283

MAS NMR
Vibrational spectroscopy and solid-state MAS NMR studies of mercury(II) acetate complexes [Hg(X)OAc]. Crystal structure of [Hg(CN)OAc] (G.A. Bowmaker, A.V. Churakov, R.K. Harris and S.-W. Oh), 89

Metal complexes
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29

Metallaborane
A molecular orbital analysis of four chromaboranes. On the curious behavior of $(\eta^5\text{-}C_5R_5)Cr$ fragments in a borane cluster environment (T.P. Fehlner), 21

Metallacarboranes
A hydridotantalum(V)-carborane analogue of Schwartz's reagent: synthesis and reactivity (M.A. Curtis, M.G. Finn and R.N. Grimes), 469

Metallaheteroborane cluster compound
Synthesis and structural characterisation of the carbene-containing metallaheteroborane compound [2-I-2-(Bu^{t}NC)-3-(Bu^{t}NHCH)-*closo*-2,1-$PdTeB_{10}H_9$] (G. Ferguson, J.F. Gallagher, J.P. Sheehan and T.R. Spalding), 477

Metal vapour synthesis
Synthesis and reactions of [Mo(2,6-lutidine)(phosphine)] derivatives (C.P. Mehnert, J. Haggitt and M.L.H. Green), 63

Methyl group transfer
Synthesis and structural characterisation of aluminium imino-amide and pyridyl-amide complexes: bulky monoanionic N,N chelate ligands via methyl group transfer (V.C. Gibson, C. Redshaw, A.J.P. White and D.J. Williams), 453

Mixed organolithium aggregate
Formation of mixed aryl–, alkyl–lithium aggregates in the heteroatom assisted lithiation of α,α′-dialkyl substituted 1,3-bis[(dimethylamino)methyl]benzene (J.G. Donkervoort, J.L. Vicario, E. Rijnberg, J.T.B.H. Jastrzebski, H. Kooijman, A.L. Spek and G. Van Koten), 463

Molybdenum
Synthesis and reactions of [Mo(2,6-lutidine)(phosphine)] derivatives (C.P. Mehnert, J. Haggitt and M.L.H. Green), 63
The synthesis, structure and reactivity of aldehyde substituted η^3-allylic complexes of molybdenum (C.J. Beddows, M.R. Box, C. Butters, N. Carr, M. Green, M. Kursawe and M.F. Mahon), 267

Multinuclear NMR
Multinuclear NMR studies on substituted derivatives of $Rh_6(CO)_{16}$ in solution (S.P. Tunik, I.S. Podkorytov, B.T. Heaton, J.A. Iggo and J. Sampanthar), 221

Nickel
Reactions of nickelocene with lithium and magnesium alkyls containing β-hydrogen atoms (S. Pasynkiewicz, A. Pietrzykowski, L. Trojanowska, P. Sobota and L. Jerzykiewicz), 111
Nido and *closo* geometries
B-frame supported bimetallics. $[(PMe_2ph)_2PtB_9H_{11}Ru(\eta^6\text{-}^{1,5,9}PrC_6H_4Me)]$ and $[(PMe_2ph)_2PtB_9H_9Ru(\eta^6\text{-}^{1,5,9}PrC_6H_4Me)]$: an interesting pair of electron-deficient *nido* and *closo* geometries (Y.-h. Kim, P.A. Cooke, R. Greatrex, J.D. Kennedy and M. Thornton-Pett), 341
Niobium
Organophosphonate derivatives of titanium and niobium alkoxoanions (R.J. Errington, J. Ridland, K.J. Willett, W. Clegg, R.A. Coxall and S.L. Heath), 473
Nitriles
The mechanism of lithiation and nitrile insertion reactions of β-methylazines: evidence from the structure of 3-$C_5H_4NCH{=}C(Ph)N(H)C(Ph){=}NLi \cdot PMDETA$ (S.C. Ball, R.P. Davies, P.R. Raithby, G.P. Shields and R. Snaith), 457
Nitrogen
Dithiadiazolyls as heterocyclic chelators: a radical approach to coordination chemistry? (A.J. Banister, I. May, J.M. Rawson and J.N.B. Smith), 241
NMR spectroscopy
Polyhedral nonaborane chemistry: an unsuspected new isomeric type in the nine-vertex *arachno*-$B_9H_{13}L$ system (K.L.F. Callaghan, U. Dörfler, T.D. McGrath, M. Thornton-Pett and J.D. Kennedy), 441
Rhodathiaboranes with 'anomalous' electron counts: synthesis, structure and reactivity (K.J. Adams, T.D. McGrath, G.M. Rosair, A.S. Weller and A.J. Welch), 315
Synthesis and characterization of trimethylsilylmethyl-, bis(trimethylsilyl)methyl-and silyl-substituted cyclopentadienes and their alkali metal complexes (M.A. Edelman, P.B. Hitchcock, M.F. Lappert, D.-S. Liu and S. Tian), 397

Organoboranes
Studies on tetraborane(8) carbonyl, $B_4H_8 \cdot CO$: its isomeric composition in the gas phase and in solution, and its reactions with alkenes (S.J. Cranson, M.A. Fox, R. Greatrex and N.N. Greenwood), 207
Organomagnesium
The metallation of imino(triphenyl)phosphorane by ethylmagnesium chloride: The synthesis, isolation and X-ray structure of $[Ph_3P{=}NMgCl \cdot O{=}P(NMe_2)_3]_2$ (A.S. Batsanov, P.D. Bolton, R.C.B. Copley, M.G. Davidson, J.A.K. Howard, C. Lustig and R.D. Price), 445
Organometallic clusters
The synthesis and characterisation of some closed polyhedral metallocarbon clusters (J.E. Davies, B.F.G. Johnson, C.M. Martin, R.H.H. Pearson and P.J. Dyson), 431
Organophosphonate
Organophosphonate derivatives of titanium and niobium alkoxoanions (R.J. Errington, J. Ridland, K.J. Willett, W. Clegg, R.A. Coxall and S.L. Heath), 473
Orthoquinones
Studies of organotin(IV)-orthoquinone systems (M.A. Brown, B.R. McGarvey, A. Ozarowski and D.G. Tuck), 165
Osmium
Metal core rearrangements in hetero-bimetallic nona-osmium carbonyl clusters; the crystal and molecular structures of $[Os_9(CO)_{24}\{Au(PCy_3)\}_2]$ and $[Os_9(CO)_{23}(Au_2DPPE)]$ (Z. Akhter, S.L. Ingham, J. Lewis and P.R. Raithby), 131

Palladium
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255
ortho-Phenylenemagnesium
9,10-Dimetallatriptycenes of group 14: a structural study (M.A. Dam, F.J.J. De Kanter, F. Bickelhaupt, W.J.J. Smeets, A.L. Spek, J. Fornies-Camer and C. Cardin), 347
Phosphide
The first synthesis, isolation and X-ray structure of a phosphonium phosphide, $(Ph_3PMe)^+[[C_6H_2(CF_3)_3\text{-}2,4,6]_2P]^-$ (M.G. Davidson, K.B. Dillon, J.A.K. Howard, S. Lamb and M.D. Roden), 481
Phosphine
Synthesis and reactions of [Mo(2,6-lutidine)(phosphine)] derivatives (C.P. Mehnert, J. Haggitt and M.L.H. Green), 63
Phosphines
Metal core rearrangements in hetero-bimetallic nona-osmium carbonyl clusters; the crystal and molecular structures of $[Os_9(CO)_{24}\{Au(PCy_3)\}_2]$ and $[Os_9(CO)_{23}(Au_2DPPE)]$ (Z. Akhter, S.L. Ingham, J. Lewis and P.R. Raithby), 131
Phosphonium
The first synthesis, isolation and X-ray structure of a phosphonium phosphide, $(Ph_3PMe)^+[[C_6H_2(CF_3)_3\text{-}2,4,6]_2P]^-$ (M.G. Davidson, K.B. Dillon, J.A.K. Howard, S. Lamb and M.D. Roden), 481
Phosphorus
Low temperature neutron and X-ray diffraction study of imino(triphenyl)phosphorane (M.G. Davidson, A.E. Goeta, J.A.K. Howard, C.W. Lehmann, G.M. McIntyre and R.D. Price), 449
Platinum
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255
Polyether ligands
The effect of polyether ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A $^1H,^6Li$-HOESY NMR study (S. Schade and G. Boche), 381
Polystyrene
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Pudovik reaction
Phospho-transfer catalysis. On the asymmetric hydrophosphonylation of aldehydes (S.R. Davies, M.C. Mitchell, C.P. Cain, P.G. Devitt, R.J. Taylor and T.P. Kee), 29
Pyridyl-amide complexes
Synthesis and structural characterisation of aluminium imino-amide and pyridyl-amide complexes: bulky monoanionic N,N chelate ligands via methyl group transfer (V.C. Gibson, C. Redshaw, A.J.P. White and D.J. Williams), 453

Radiotransition
Synthesis and structural characterization of a thioether-bridged *commo*-metallabis(dicarbollide) species: a model system for Venus flytrap cluster reagents (J.M. Nabakka, D.E. Harwell, C.B. Knobler and M.F. Hawthorne), 423
Reaction mechanisms
The mechanism of lithiation and nitrile insertion reactions of β-methylazines: evidence from the structure of 3-$C_5H_4NCH{=}C(Ph)N(H)C(Ph){=}NLi \cdot PMDETA$ (S.C. Ball, R.P. Davies, P.R. Raithby, G.P. Shields and R. Snaith), 457
$Rh_6(CO)_{16}$
Multinuclear NMR studies on substituted derivatives of $Rh_6(CO)_{16}$ in solution (S.P. Tunik, I.S. Podkorytov, B.T. Heaton, J.A. Iggo and J. Sampanthar), 221

Rhodathiaboranes
Rhodathiaboranes with 'anomalous' electron counts: synthesis, structure and reactivity (K.J. Adams, T.D. McGrath, G.M. Rosair, A.S. Weller and A.J. Welch), 315
Rhodium
Multinuclear NMR studies on substituted derivatives of $Rh_6(CO)_{16}$ in solution (S.P. Tunik, I.S. Podkorytov, B.T. Heaton, J.A. Iggo and J. Sampanthar), 221
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255
closo-Ru_xC_y polyhedral frameworks
The synthesis and characterisation of some closed polyhedral metallocarbon clusters (J.E. Davies, B.F.G. Johnson, C.M. Martin, R.H.H. Pearson and P.J. Dyson), 431
Ruthenium clusters
Formation of $H_2Ru_6(CO)_{17}$ from $H_2Ru_6(CO)_{18}$ an improved synthesis of $HRu_6(CO)_{17}$ B (D.A. McCarthy, J. Krause Bauer, F.-E. Hong, J.R. Oh, H. Deng, J. Liu and S.G. Shore), 309

^{29}Si and ^{13}C NMR spectroscopy
Preparation, ^{29}Si and ^{13}C NMR and DFT/IGLO studies of silylcarboxonium ions (G.K.S. Prakash, Q. Wang, G. Rasul and G.A. Olah), 119
Silica
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Silicon
9,10-Dimetallatriptycenes of group 14: a structural study (M.A. Dam, F.J.J. De Kanter, F. Bickelhaupt, W.J.J. Smeets, A.L. Spek, J. Fornies-Camer and C. Cardin), 347
Silver
η^1- and η^2-benzene coordination in $[Ag(C_6D_6)_3BF_4]$ (A.S. Batsanov, S.P. Crabtree, J.A.K. Howard, C.W. Lehmann and M. Kilner), 59
Silylcarboxonium ions
Preparation, ^{29}Si and ^{13}C NMR and DFT/IGLO studies of silylcarboxonium ions (G.K.S. Prakash, Q. Wang, G. Rasul and G.A. Olah), 119
Sodium reagent
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Solution structures
The effect of (poly)amine ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 359
Solution structures in THF/[D_8]THF 1:1
The effect of polyether ligands on the solution structure of [^{6}Li]-α-(phenylthio)benzyllithium in tetrahydrofuran: A ^{1}H,^{6}Li-HOESY NMR study (S. Schade and G. Boche), 381
Stereoselective crystallization
Formation of mixed aryl–, alkyl–lithium aggregates in the heteroatom assisted lithiation of α,α′-dialkyl substituted 1,3-bis[(dimethylamino)methyl]benzene (J.G. Donkervoort, J.L. Vicario, E. Rijnberg, J.T.B.H. Jastrzebski, H. Kooijman, A.L. Spek and G. Van Koten), 463
Structure
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255
Sulfur
Dithiadiazolyls as heterocyclic chelators: a radical approach to coordination chemistry? (A.J. Banister, I. May, J.M. Rawson and J.N.B. Smith), 241
Synthesis
A convenient route to carbon-substituted derivatives of *nido*-5,6-$C_2B_8H_{12}$ (B. Štíbr, F. Teixidor, C. Viñas and J. Fusek), 125
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I). Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255
Tantalacarboranes
A hydridotantalum(V)-carborane analogue of Schwartz's reagent: synthesis and reactivity (M.A. Curtis, M.G. Finn and R.N. Grimes), 469

Tantalum
A hydridotantalum(V)-carborane analogue of Schwartz's reagent: synthesis and reactivity (M.A. Curtis, M.G. Finn and R.N. Grimes), 469
Tetraazamacrocycle
Preparation and structures of some tetraazamacrocyclic complexes of In(III) (P.R. Phillips, M.G.H. Wallbridge and J. Barker), 301
Tetraborane(8) carbonyl
Studies on tetraborane(8) carbonyl, $B_4H_8 \cdot CO$: its isomeric composition in the gas phase and in solution, and its reactions with alkenes (S.J. Cranson, M.A. Fox, R. Greatrex and N.N. Greenwood), 207
Thiophene
Dinuclear copper(I) complexes of 24-membered bibracchial tetraimine Schiff base macrocycles derived from 2,5-diformylthiophene (H. Adams, N.A. Bailey, S.R. Collinson, D.E. Fenton, J.C. Hawley and S.J. Kitchen), 7
Tin
9,10-Dimetallatriptycenes of group 14: a structural study (M.A. Dam, F.J.J. De Kanter, F. Bickelhaupt, W.J.J. Smeets, A.L. Spek, J. Fornies-Camer and C. Cardin), 347
Titania
Polymer and metal oxide supported alkali metal naphthalenides: application in the generation of lithium and sodium reagents (T.R. Van den Ancker and C.L. Raston), 283
Titanium
Organophosphonate derivatives of titanium and niobium alkoxoanions (R.J. Errington, J. Ridland, K.J. Willett, W. Clegg, R.A. Coxall and S.L. Heath), 473
Synthesis and structural characterization of sulfonates, phosphinates and carboxylates of organometallic Group 4 metal fluorides (S.A.A. Shah, H. Dorn, J. Gindl, M. Noltemeyer, H.-G. Schmidt and H.W. Roesky), 1
Total orbital energy
The non-perpendicular and non-parallel alkyne bridge in $W_2(\mu\text{-}C_2H_2)(\mu\text{-}OCH_2^tBu)_2(OCH_2^tBu)_6$ (M.H. Chisholm and M.A. Lynn), 141
Transition metals
Synthesis and structural characterization of sulfonates, phosphinates and carboxylates of organometallic Group 4 metal fluorides (S.A.A. Shah, H. Dorn, J. Gindl, M. Noltemeyer, H.-G. Schmidt and H.W. Roesky), 1
Triruthenium dodecacarbonyl
The synthesis and characterisation of some closed polyhedral metallocarbon clusters (J.E. Davies, B.F.G. Johnson, C.M. Martin, R.H.H. Pearson and P.J. Dyson), 431
Tris(cyanoethyl)phosphine
Synthesis and properties of new tris(cyanoethyl)phosphine complexes of platinum (0,II), palladium (0,II), iridium (I) and rhodium (I).

Conformational analysis of tris(cyanoethyl)phosphine ligands (A.G. Orpen, P.G. Pringle, M.B. Smith and K. Worboys), 255

Tungsten

The non-perpendicular and non-parallel alkyne bridge in $W_2(\mu\text{-}C_2H_2)(\mu\text{-}OCH_2^tBu)_2(OCH_2^tBu)_6$ (M.H. Chisholm and M.A. Lynn), 141

Wade's rules

Rhodathiaboranes with 'anomalous' electron counts: synthesis, structure and reactivity (K.J. Adams, T.D. McGrath, G.M. Rosair, A.S. Weller and A.J. Welch), 315

X-ray

Preparation and structures of some tetraazamacrocyclic complexes of In(III) (P.R. Phillips, M.G.H. Wallbridge and J. Barker), 301

X-ray and neutron diffraction

Low temperature neutron and X-ray diffraction study of imino(triphenyl)phosphorane (M.G. Davidson, A.E. Goeta, J.A.K. Howard, C.W. Lehmann, G.M. McIntyre and R.D. Price), 449

X-ray crystal structure

Dinuclear copper(I) complexes of 24-membered bibracchial tetraimine Schiff base macrocycles derived from 2,5-diformylthiophene (H. Adams, N.A. Bailey, S.R. Collinson, D.E. Fenton, J.C. Hawley and S.J. Kitchen), 7

X-ray diffraction

Experimental and theoretical studies on group 1 metallacarboranes: Synthesis, structure and ab initio calculations of the NMR chemical shifts of the 1-(THF)-1-(TMEDA)-1-Na-2,4-$(SiMe_3)_2$-2,4-$C_2B_4H_5$ and related carboranes (M.B. Ezhova, H. Zhang, J.A. Maguire and N.S. Hosmane), 409

Formation of the lithium alkylaluminium secondary amide $[Me_2Al\{(PhCH_2)_2N\}_2Li \cdot THF]$ by a methane elimination/amide insertion process (D.R. Armstrong, F.J. Craig, A.R. Kennedy and R.E. Mulvey), 355

Polyhedral nonaborane chemistry: an unsuspected new isomeric type in the nine-vertex *arachno*-$B_9H_{13}L$ system (K.L.F. Callaghan, U. Dörfler, T.D. McGrath, M. Thornton-Pett and J.D. Kennedy), 441

Rhodathiaboranes with 'anomalous' electron counts: synthesis, structure and reactivity (K.J. Adams, T.D. McGrath, G.M. Rosair, A.S. Weller and A.J. Welch), 315

The first synthesis, isolation and X-ray structure of a phosphonium phosphide, $(Ph_3PMe)^+\{[C_6H_2(CF_3)_3\text{-}2,4,6]_2P\}^-$ (M.G. Davidson, K.B. Dillon, J.A.K. Howard, S. Lamb and M.D. Roden), 481

The metallation of imino(triphenyl)phosphorane by ethylmagnesium chloride: The synthesis, isolation and X-ray structure of $[Ph_3P{=}NMgCl \cdot O{=}P(NMe_2)_3]_2$ (A.S. Batsanov, P.D. Bolton, R.C.B. Copley, M.G. Davidson, J.A.K. Howard, C. Lustig and R.D. Price), 445

The synthesis, structure and reactivity of aldehyde substituted η^3-allylic complexes of molybdenum (C.J. Beddows, M.R. Box, C. Butters, N. Carr, M. Green, M. Kursawe and M.F. Mahon), 267

X-ray diffraction analysis

Metallaheteroborane chemistry. Part 14. Synthesis of the $\{MS_2B_7\}$-cluster compounds $[9,9\text{-}(PX_3)_2\text{-}9,6,8\text{-}PtS_2B_7H_7]$ (where X = Ph or OMe), $[9,9\text{-}(PPh_3)_2\text{-}9,6,8\text{-}RhS_2B_7H_8]$ and $[5,5\text{-}(PPh_3)_2\text{-}5,6,10\text{-}RhS_2B_7H_8]$, and the $\{M_2S_2B_7\}$-cluster compound $[(PPh_3)_2HRh(PPh_3)ClRhS_2B_7H_7]$ (M.P. Murphy, T.R. Spalding, C. Cowey, J.D. Kennedy, M. Thornton-Pett and J. Holub), 151

X-ray structure

A structural and theoretical study of the monolithiation of hydroxylamines (D.R. Armstrong, W. Clegg, S.M. Hodgson, R. Snaith and A.E.H. Wheatley), 233

Metal core rearrangements in hetero-bimetallic nona-osmium carbonyl clusters; the crystal and molecular structures of $[Os_9(CO)_{24}\{Au(PCy_3)\}_2]$ and $[Os_9(CO)_{23}(Au_2DPPE)]$ (Z. Akhter, S.L. Ingham, J. Lewis and P.R. Raithby), 131

Preparation and structures of $\{Li[C(N^tBu)_2(HN^tBu)]\}_2 \cdot (THF)$ and $\{Li_2[C(N^tBu)_3]\}_2$, containing the novel anions $[C(N^tBu)_2(HN^tBu)]^-$ and $[C(N^tBu)_3]^{2-}$ (T. Chivers, M. Parvez and G. Schatte), 213

The mechanism of lithiation and nitrile insertion reactions of β-methylazines: evidence from the structure of $3\text{-}C_5H_4NCH{=}C(Ph)N(H)C(Ph){=}NLi \cdot PMDETA$ (S.C. Ball, R.P. Davies, P.R. Raithby, G.P. Shields and R. Snaith), 457

Ylide

The first synthesis, isolation and X-ray structure of a phosphonium phosphide, $(Ph_3PMe)^+\{[C_6H_2(CF_3)_3\text{-}2,4,6]_2P\}^-$ (M.G. Davidson, K.B. Dillon, J.A.K. Howard, S. Lamb and M.D. Roden), 481

Zirconium

Synthesis and structural characterization of sulfonates, phosphinates and carboxylates of organometallic Group 4 metal fluorides (S.A.A. Shah, H. Dorn, J. Gindl, M. Noltemeyer, H.-G. Schmidt and H.W. Roesky), 1